

# Illustrator Draftsman

# Volume 2—Standard Drafting Practices and Theory

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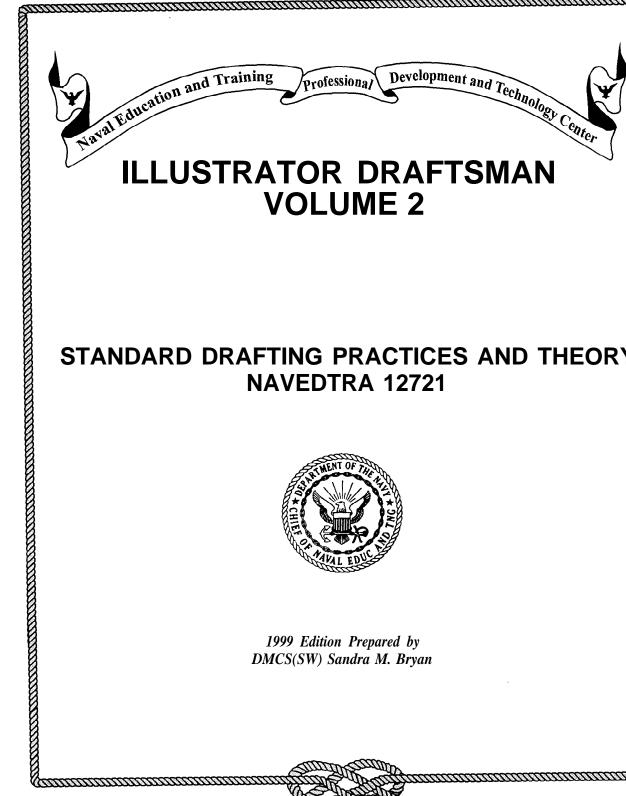
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Although the words "he," "him," and "his" are used sparingly in this manual to enhance communication, they are not intended to be gender driven nor to affront or discriminate against anyone reading this material.

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# **ILLUSTRATOR DRAFTSMAN VOLUME 2**

## STANDARD DRAFTING PRACTICES AND THEORY **NAVEDTRA 12721**



1999 Edition Prepared by DMCS(SW) Sandra M. Bryan



#### **PREFACE**

#### Introduction: the training manual

The *Illustrator Draftsman* (DM) training manual (TRAMAN), NAVEDTRA 12721, is the second in a series of four DM training manuals. With its separate nonresident training course (NRTC), NAVEDTRA 72721, it forms a self-study package for enlisted personnel of the Illustrator Draftsman (DM) rating and provides information in support of DM Occupational Standards. Volume 2, entitled *Standard Drafting Practices and Theory*, includes the following topics: composition, geometric construction, general drafting practices, technical drawings, perspective drawing, and parallel projections.

# The nonresident training course

The NRTC consists of questions designed to help you, the student, understand the TRAMAN. Before beginning serious study, you may find it helpful to browse the entire package.

#### 1999 Edition

Prepared by the Naval Education and Training Professional Development and Technology Center, Pensacola, Florida, for the Chief of Naval Education and Training.

Published by the Naval Education and Training Professional Development and Technology Center.

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#### THE UNITED STATES NAVY

#### **GUARDIAN OF OUR COUNTRY**

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends; the United States Navy exists to make it so.

#### WE SERVE WITH HONOR

Tradition, valor, and victory are the Navy's heritage from the past. To these may be added dedication, discipline, and vigilance as the watchwords of the present and the future.

At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families.

Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

#### THE FUTURE OF THE NAVY

The Navy will always employ new weapons, new techniques, and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war.

Mobility, surprise, dispersal, and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

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### **ILLUSTRATOR DRAFTSMAN (DM) TRAINING SERIES**

The following volumes in the DM Training Series are available or planned:

#### DM, Vol. 1, NAVEDTRA 12720

*Equipment*. This is an overview of general shop administration, available equipment, required operator adjustments, and equipment maintenance. Knowing the capabilities and limitations of the equipment before creating artwork is essential.

#### DM, Vol. 2, NAVEDTRA 12721

Standard Drafting Practices And Theory. Industry standards for composition, geometric construction, general drafting practices, technical drawings, perspective projections, and parallel projections are foundational material on which all executionable practices rely.

#### DM, Vol. 3, NAVEDTRA 12722

Executionable Practices. These chapters cover the theory of color, photography, computer-generated art, figure drawing, cartooning, animation, mediums, lettering, and airbrush. These are the skills a successful DM must master.

#### DM, Vol. 4, NAVEDTRA 12723-A

*Presentations Graphics*. Copy preparation, audio-viusal presentations, television graphics, and displays and exhibits are end products and will influence the how and why DMs do business.

#### Nonresident Training Courses (NRTC)

Nonresident Training Courses for the Illustrator Draftsman (DM) TRAMAN:

Paygrade	Volume	NRTC
E4/E5	Volume 1 Volume 2 Volume 3 Volume 4	NAVEDTRA 72720 NAVEDTRA 72721 NAVEDTRA 72722 NAVEDTRA 72723
E6/E7	Volume 1 Volume 3 Volume 4	NAVEDTRA 82720 NAVEDTRA 82722 NAVEDTRA 82723

#### NOTE:

Check the Naval Education and Training Professional Development and Technology Center home page for advancement requirements (http://www.cnet.navy.mil/netpdtc/netpdtc.htm.) and the *Catalog of Nonresident Training Courses*, NAVEDTRA 12061, for ordering information.